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| APPLICATION NO.      | F    | ILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|------|------------|-------------------------|---------------------|------------------|
| 10/776,407           |      | 02/10/2004 | Steven A. Crosson Smith | h BT-024 2424       |                  |
| 29956                | 7590 | 10/21/2005 |                         | EXAMINER            |                  |
| TIMOTHY<br>8710 KILK |      |            |                         | AUGUSTIN            | , EVENS J        |
| FORT MY              |      |            | ART UNIT                | PAPER NUMBER        |                  |
|                      |      |            |                         | 3621                |                  |

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                          | Application No.                                 | Applicant(s)                 |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------|--|--|--|--|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Office Asticus Occurrence                                                                                                | 10/776,407                                      | CROSSON SMITH, STEVEN A.     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Office Action Summary                                                                                                    | Examiner                                        | Art Unit                     |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          | Evens Augustin                                  | 3621                         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                                                 |                              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                                                                                          |                                                 |                              |  |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          |                                                 |                              |  |  |  |  |
| 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Responsive to communication(s) filed on 18 Au                                                                            | igust 2005.                                     |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ·                                                                                                                        | action is non-final.                            |                              |  |  |  |  |
| 3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Since this application is in condition for allowar                                                                       | nce except for formal matters, pro              | secution as to the merits is |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                        |                                                 |                              |  |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                          |                                                 |                              |  |  |  |  |
| 4)🖂                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4)⊠ Claim(s) <u>1,5-8,11 and 12</u> is/are pending in the application.                                                   |                                                 |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4a) Of the above claim(s) is/are withdrawn from consideration.                                                           |                                                 |                              |  |  |  |  |
| 5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Claim(s) is/are allowed.                                                                                                 |                                                 |                              |  |  |  |  |
| 6)⊠                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Claim(s) <u>1,5-8,11 and 12</u> is/are rejected.                                                                         |                                                 |                              |  |  |  |  |
| 7)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Claim(s) is/are objected to.                                                                                             |                                                 |                              |  |  |  |  |
| 8)[                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Claim(s) are subject to restriction and/or                                                                               | r election requirement.                         |                              |  |  |  |  |
| Applicati                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | on Papers                                                                                                                |                                                 |                              |  |  |  |  |
| 9) 🗆                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | The specification is objected to by the Examine                                                                          | r.                                              |                              |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                                                 |                              |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          |                                                 |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |                                                 |                              |  |  |  |  |
| 11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.             |                                                 |                              |  |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                                                 |                              |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          |                                                 |                              |  |  |  |  |
| a) All b) Some * c) None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          |                                                 |                              |  |  |  |  |
| ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1. Certified copies of the priority documents                                                                            | s have been received.                           |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2. Certified copies of the priority documents have been received in Application No                                       |                                                 |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3. Copies of the certified copies of the priority documents have been received in this National Stage                    |                                                 |                              |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                                                 |                              |  |  |  |  |
| * 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | See the attached detailed Office action for a list                                                                       | of the certified copies not receive             | ed.                          |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          |                                                 |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          |                                                 |                              |  |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                                                 |                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)                                      | . 4) ∐ Interview Summary<br>Paper No(s)/Mail Da |                              |  |  |  |  |
| 3) Inform                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date                                                 |                                                 | Patent Application (PTO-152) |  |  |  |  |
| S. Patent and Trademark Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                                                 |                              |  |  |  |  |

### Response to Amendment

This is in response to an amendment file on August 18<sup>th</sup>, 2005 for letter for patent filed on February 10<sup>th</sup>, 2004. In the amendment, claims 1, 6-8 and 11 have been amended. Claims 2-4, 9-10 and 13-18 have been cancelled. Claims 1, 5-8 and 11-12 are pending in the letter.

## Response to Arguments

1. The United States Patent and Trademark Office (USPTO) has considered the applicant's arguments filed on August 18<sup>th</sup>, 2005, but the USPTO does find the applicant's arguments to be persuasive, and the amended claims do not place the application in condition for allowance.

Although Linehan teaches the aspects of generating dummy data for the purpose/functionality of authentication, Linehan did not explicitly describe a method in which the dummy data is being authenticated and going through the encryption process.

However, Candelore et al. describe an invention that relates to an apparatus for efficiently and securely transferring blocks of program information between a secure circuit and an external storage device. Candelore et al. teach an invention in which encrypted, authenticated information and dummy data are securely communicated between an external memory and a cryptographic ASIC in cipher block chains (column 17, lines 61-64). Modern cryptographic applications often employ public key cryptography, which generally require larger keys than secret key cryptography. The scrambling sender or descrambling receiver may perform some type of cryptographic application which may interface on an open network such as the Internet, which may require the storing of a number of various public keys, e.g., from a Root Authority, or

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Certificate Authority (column 8, lines 65-67, column 9, lines 1-6). If a pirate changes any data in preceding blocks in the chain for trialing, the computed hash data that is compared with the authentication information will be incorrect, and the resulting verification value will not match (column 12, lines 7-10). According to Candelore et al., the dummy is authenticated just like the any other data in the process (column 23, lines 38-58).

Therefore, in view of Candelore et al.'s teaching, it would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to combine Linehan's invention in view of Candelore et al. for authenticating dummy data just like any other data in the process. It would have been obvious to one skilled in the art to authenticate dummy data because it would confuse the pirate attempting to analyze the authenticated data (column 23, lines 53-55).

### Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5-8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linehan (U.S 6327578) in view of Candelore et al. (U.S 6061449)

As per claims 1, 5-8 and 11-12, Linehan discloses an invention that includes the step of sending from a consumer's computer a start message over an Internet network to a merchant's

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computer. The merchant's computer then replies to the consumer's computer with a merchant message including a wallet initiation message, a merchant digital signature, and a digital certificate from an acquiring bank. The computer invention comprises of the following:

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- A merchant generating an authorization request which includes containing payment
  amount, order description, timestamp, a random nonce, and possible additional data
  depending upon requirements (column 9, lines 35-40). The authorization request can also
  include a hash of an order description instead of the actual order description (column 16,
  lines 18-25)
- The authorization request or hash is transferred to a remote system (column 14, lines 28-31)
- Once the authorization request/hash is sent to consumer computer, the request gets sent to consumer's/issuing bank and verifies the merchant's signature to prove that the consumer is dealing with the actual merchant and validates the merchant's certificate and the acquirer's certificate (column 6, lines 8-12, column 15, lines 25-32)
- Sending over the Internet network an authorization token, an issuer's digital certificate, and a reference to the consumer's credit or debit card number. The authorization token includes the payment amount, order description, timestamp, a random nonce, the merchant identifier from the merchant's digital certificate, and the acquiring bank identifier from the acquiring bank's digital certificate, plus a reference to the consumer's credit or debit card number (column 25, lines 36-44)
- The merchant presenting the authorization code to a payment processor in order to complete the transaction (column 6, lines 48-55, column 16, lines 6-8)

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- The authorization includes a combination of payment amount, order description, timestamp, a random nonce, and possible additional data depending upon requirements (column 9, lines 35-40). The authorization request can also include a hash of an order description instead of the actual order description (column 16, lines 18-25)
- The system can also generate dummy data (column 11, lines 3-9), in combination with the payment amount, order description, timestamp, a random nonce, the merchant identifier from the merchant's digital certificate, and the acquiring bank identifier from the acquiring bank's digital certificate, plus a reference to the consumer's credit or debit card number (column 25, lines 36-44)
- The system also used challenge-response authentication system between the remote computer and the server (column 7, lines 25-33)

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cryptographic applications often employ public key cryptography, which generally require larger keys than secret key cryptography. The scrambling sender or descrambling receiver may perform some type of cryptographic application which may interface on an open network such as the Internet, which may require the storing of a number of various public keys, e.g., from a Root Authority, or Certificate Authority (column 8, lines 65-67, column 9, lines 1-6). If a pirate changes any data in preceding blocks in the chain for trialing, the computed hash data that is compared with the authentication information will be incorrect, and the resulting verification value will not match (column 12, lines 7-10). According to Candelore et al., the dummy is authenticated just like the any other data in the process (column 23, lines 38-58).

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### Conclusion

4. THIS ACTION IS MADE FINAL, as necessitated by the amendment. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evens Augustin whose telephone number is 571-272-6860. The examiner can normally be reached on Monday thru Friday 8 to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Trammel can be reached on 571-272-6712.

Any response to this action should be mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is 571-272-6584.

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Evens J. Augustin October 18, 2005 Art Unit 3621

Liffa Jaw P PRIMARY EXAMINER

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